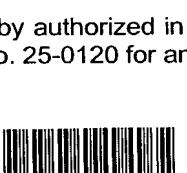


| | | |
|--|---|---|
| TRANSMITTAL LETTER OT THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 | | Attorney Docket No. 3501-1006 U.S. Application No. 10/088116 |
| INTERNATIONAL APPLN. NO. PCT/FI00/00781 | INTERNATIONAL FILING DATE 15 September 2000 | PRIORITY DATE CLAIMED 17 SEPTEMBER 1999 |
| TITLE OF INVENTION: SWIMMING DEVICE | | |
| APPLICANT(S) FOR DE/EO/US: TUOMO PETÄJÄ-SUVANTO | | |
| Applicant herewith submits to the United States Designated Elected Office (DO/EO/US) the following items and other information: | | |
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input checked="" type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau) b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. See attached PCT/IB/308. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)) <ol style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made, however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | | |
| Items 11 to 20 below concern document(s) or information included: | | |
| <ol style="list-style-type: none"> 11. <input checked="" type="checkbox"/> Information Disclosure Statement (IDS) w/PTO-1449 - <input checked="" type="checkbox"/> Copy of IDS citations 12. <input type="checkbox"/> Assignment Papers (cover sheet & document(s)) 13. <input checked="" type="checkbox"/> A FIRST Preliminary Amendment. 14. <input type="checkbox"/> A SECOND or SUBSEQUENT Preliminary Amendment. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A change of power of attorney and/or address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application (35 U.S.C. 154(d)(4)). 20. <input checked="" type="checkbox"/> Other items or information: <u>Abstract on a separate sheet, International Search Report (PCT/ISA/210), Application Data Sheet, International Preliminary Examination Report, form PCT/IB/308</u> | | |

| U.S. APPLICATION NO. 10/088116 | | INTERNATIONAL APPLN. NO. PCT/FI00/00781 | ATTORNEY DOCKET NO. 3501-1006 | | | | | | | | | | | | | | | | | | | | |
|---|--------------|---|----------------------------------|------------------------|--------------|--------------|------|--------------|-----------|---|-----------|--------------------|---------|---|-----------|---|--|------------|--|---|--|--|--|
| 21. <input checked="" type="checkbox"/> The following fees are submitted: | | | | | | | | | | | | | | | | | | | | | | | |
| BASIC NATIONAL FEE (37 CFR 1.492 (a) (1)-(5): | | | | | | | | | | | | | | | | | | | | | | | |
| Neither international preliminary examination fee nor international search fee paid to USPTO and international Search Report not prepared by the EPO or JPO\$1040.00 | | | | | | | | | | | | | | | | | | | | | | | |
| International preliminary examination fee not paid to USPTO but International Search Report prepared by the EPO or JPO\$890.00 | | | | | | | | | | | | | | | | | | | | | | | |
| International preliminary examination fee not paid to USPTO but International search fee paid to USPTO\$740.00 | | | | | | | | | | | | | | | | | | | | | | | |
| International preliminary examination fee paid to USPTO but all claims did not satisfy provision of PCT Article 33 (1)-(4).....\$710.00 | | | | | | | | | | | | | | | | | | | | | | | |
| International preliminary examination fee paid to USPTO and all claims satisfied provision of PCT Article 33 (1)-(4).....\$100.00 | | | | | | | | | | | | | | | | | | | | | | | |
| ENTER APPROPRIATE BASIC FEE AMOUNT | | | | | | | | | | | | | | | | | | | | | | | |
| Surcharge of \$130.00 for furnishing the oath or declaration than <input type="checkbox"/> 20- <input checked="" type="checkbox"/> 30 Months from the earliest claimed priority date (37 CFR 1.492(e)) | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CLAIMS</th> <th>NUMBER FILED</th> <th>NUMBER EXTRA</th> <th>RATE</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>13 - 20 =</td> <td>0</td> <td>X \$18.00</td> </tr> <tr> <td>Independent Claims</td> <td>2 - 3 =</td> <td>0</td> <td>X \$84.00</td> </tr> <tr> <td colspan="2">MULTIPLE DEPEND CLAIM(S) (if applicable)</td> <td colspan="2">+ \$280.00</td> </tr> <tr> <td colspan="4" style="text-align: right;">TOTAL OF ABOVE CALCULATION - \$ 1,170.00</td> </tr> </tbody> </table> | | | | CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | Total Claims | 13 - 20 = | 0 | X \$18.00 | Independent Claims | 2 - 3 = | 0 | X \$84.00 | MULTIPLE DEPEND CLAIM(S) (if applicable) | | + \$280.00 | | TOTAL OF ABOVE CALCULATION - \$ 1,170.00 | | | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | | | | | | | | | | | | | | | | | | | |
| Total Claims | 13 - 20 = | 0 | X \$18.00 | | | | | | | | | | | | | | | | | | | | |
| Independent Claims | 2 - 3 = | 0 | X \$84.00 | | | | | | | | | | | | | | | | | | | | |
| MULTIPLE DEPEND CLAIM(S) (if applicable) | | + \$280.00 | | | | | | | | | | | | | | | | | | | | | |
| TOTAL OF ABOVE CALCULATION - \$ 1,170.00 | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½. | | | | | | | | | | | | | | | | | | | | | | | |
| SUBTOTAL = \$ 585.00 | | | | | | | | | | | | | | | | | | | | | | | |
| Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492Z(f)). | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL NATIONAL FEE = \$ 585.00 | | | | | | | | | | | | | | | | | | | | | | | |
| Fee for recording the enclosed assigned (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) \$40.00 per property + | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL FEES ENCLOSED - \$ 585.00 | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Amount to be refunded:</td> <td style="width: 30%; text-align: right;">\$</td> </tr> <tr> <td>Charged:</td> <td style="text-align: right;">\$</td> </tr> </table> | | | | Amount to be refunded: | \$ | Charged: | \$ | | | | | | | | | | | | | | | | |
| Amount to be refunded: | \$ | | | | | | | | | | | | | | | | | | | | | | |
| Charged: | \$ | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> A Check in the amount of \$585.00 to cover all fees is attached. | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to Deposit account No. 25-0120 in the name of Young & Thompson, as described below. A duplicate copy of this sheet is enclosed. | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17. | | | | | | | | | | | | | | | | | | | | | | | |
| SEND ALL CORRESPONDENCE TO: 745 South 23 rd Street Arlington, VA 22202 Telephone (703) 521-2297 Y&T Customer No. 000466 | |  00466 <small>PATENT TRADEMARK OFFICE</small> | | | | | | | | | | | | | | | | | | | | | |
| | | SIGNATURE  Benoit Castel NAME | | | | | | | | | | | | | | | | | | | | | |
| | | 35,041 REGISTRATION NO. | | | | | | | | | | | | | | | | | | | | | |

PATENT
3501-1006

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of: Tuomo PETÄJÄ-SUVANTO

Appl. No.: **NEW NATIONAL PHASE
APPLICATION IN THE
UNITED STATES** Group:

Filed: March 15, 2002 Examiner:

For: SWIMMING DEVICE

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, DC 20231

March 15, 2002

Sir:

Prior to the first Official Action and calculation of the filing fee, the following preliminary amendments and remarks are respectfully submitted in connection with the above-identified application.

IN THE ABSTRACT OF THE DISCLOSURE:

Please insert the Abstract of the Disclosure attached on a separate sheet attached hereto.

IN THE CLAIMS:

Please cancel claims 1-10 without prejudice or disclaimer of the subject matter contained therein.

Please add the following claims:

--11. (new) A swimming device for testing a lure to be used in rod-fishing, characterized in that the swimming device comprises two substantially parallel pipe-like means, a flow pipe and testing pipe, which are arranged in a substantially horizontal position and connected together by connection means arranged preferably at both ends of the pipes, and there are stilling basins immediately next to the connection means, and that a control means maintaining the flow of a fluid led into the swimming device is arranged in one pipe-like means, for testing the lure lowered into the swimming device through a lure tower extending from the testing pipe and connected thereto, in a fluid flow generated in the testing pipe.--

--12. (new) A swimming device as claimed in claim 11, characterized in that the testing pipe is at least partly transparent.--

--13. (new) A swimming device as claimed in claim 11, characterized in that the control means is a propeller.--

--14. (new) A swimming device as claimed in claim 11, characterized in that the control means is arranged in the flow pipe.--

--15. (new) A swimming device as claimed in claim 11, characterized in that a discharge opening, connecting the lure tower and the testing pipe, is arranged in the flow direction of

the fluid to be at least partly separate from the flow port between the testing pipe and the flow pipe.--

--16. (new) A swimming device for testing a lure to be used in rod-fishing, characterized in that the swimming device comprises two substantially parallel pipe-like means, a flow pipe and testing pipe, which are arranged in a substantially horizontal position, the testing pipe being arranged to the side of the flow pipe, the pipes being connected together by connection means comprising flow ports in the casing of the flow pipe, the flow ports being arranged preferably at both ends of the pipes, while there are stilling basins immediately next to the connection means, as a control means is arranged to maintain the flow of a fluid led into the swimming device, for testing the lure lowered into the swimming device through a lure tower extending from the testing pipe and connected thereto, in a fluid flow generated in the testing pipe by the control means arranged in one pipe-like means.--

--17. (new) A swimming device as claimed in claim 16, characterized in that the flow pipe has control lamellas in the longitudinal direction of the device to prevent swirling in the fluid flow.--

--18. (new) A swimming device as claimed in claim 16, characterized in that the flow pipe is arranged to be longer than the testing pipe and to have stilling basins at both ends.--

--19. (new) A swimming device as claimed in claim 18, characterized in that at least the stilling basin on the side of the direction of fluid flow caused by the control means has protrusions to reduce the swirling movement of the fluid.--

--20. (new) A swimming device as claimed in claim 19, characterized in that the protrusions are concentric.--

--21. A swimming device as claimed in claim 16, characterized in that the testing pipe is at least partly transparent.--

--22. (new) A swimming device as claimed in claim 16, characterized in that the control means is a propeller.--

--23. (new) A swimming device as claimed in claim 16, characterized in that the control means is arranged in the flow pipe.--

REMARKS

Claims 1-10 have been cancelled and claims 11-23 have been added.

The above changes in the claims merely place this national phase application in substantially the same condition as it was during Chapter II of the international phase, with the multiple dependencies being removed. .

Docket No. 3501-1006

Entry of the above amendments is earnestly solicited.
An early and favorable first action on the merits is earnestly
requested.

Should there be any matters that need to be resolved in
the present application, the Examiner is respectfully requested
to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this,
concurrent, and future replies, to charge payment or credit any
overpayment to Deposit Account No. 25-0120 for any additional
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

Benoit Castel

Benoit Castel, Reg. No. 35,041

745 South 23rd Street
Arlington, VA 22202
Telephone (703) 521-2297

BC:lmt
Attachments

ABSTRACT

The present invention relates to a swimming device for testing a lure (12) used in rod-fishing. This type of a device comprises two substantially parallel pipe-like means (1, 2) and arranged in a substantially horizontal position. The pipe-like means are preferably connected to each other by connection means (3, 4) arranged at both ends of the pipes, and there are stilling basins (9, 10) immediately next to the connection means. Further, a control means (6) maintaining the flow of the fluid (5) led in to the swimming device is arranged into one of the pipe-like means. In the operating position of the device, the upper pipe-like means, i.e. testing pipe, has a lure tower (13) connected to the pipe and protruding from it, and the lure (12) can be lowered into the swimming device for testing it in the fluid flow caused in the testing pipe.

WO 01/20978

2/Pr17

PCT/FI00/00781

1

SWIMMING DEVICE

FIELD OF THE INVENTION

The present invention relates to a swimming device according to the preamble of claim 1, for testing a lure used in rod-fishing and angling.

5 BACKGROUND OF THE INVENTION

Making one's own lures has long been a special sector in lure-fishing and angling. A great deal of literature exists on the matter and various lure-making models and methods have been widely presented.

In general, lures are made at home and during winter in particular
10 when less fishing is done especially in the northern hemisphere. One special problem in lure-making is then testing the finished lure or one being made. Testing requires a water pool in which the lure can be trolled and its behaviour thus observed in its environment of use. During open waters, a near-by water system can naturally be used as the water pool. Alternatively, the lure can be
15 tested at home in the bath tub if available.

Using water systems or tubs or the like is, however, difficult because it is difficult to accurately observe the movements of the lure. When testing the results of lure-making in tubs or pools, the achieved swimming movement of the lure is usually too short for it to allow any accurate
20 conclusions on the functioning of the lure in actual fishing conditions.

BRIEF DESCRIPTION OF THE INVENTION

It is thus an object of the present invention to eliminate the current drawbacks in lure-testing and to provide a novel solution which simply, advantageously and quickly illustrates the functioning of a finished lure or one
25 being made in different flow conditions.

This object is achieved by a swimming device having the characteristics of the invention defined in the claims. To be more precise, the device of the invention is mainly characterized by what is stated in the characterizing part of claim 1.

30 In the present invention, a lure refers to spinners, spoons, plugs and jigs used in lure-fishing and to different flies used in fly-fishing.

The invention provides considerable advantages. It provides a device for testing a lure in the immediate vicinity of the place where it is made, whereby making lures becomes considerably simpler than before. This way, a

lure being made can be tested immediately after it is finished, and testing different structural solutions is also very easy while the work progresses. The device is easy to use, since it is small, structurally simple and reliable. By means of the invention, it is also easy to test different lures in different flow 5 conditions and when necessary, special devices can be constructed to best suit the testing of flies, spinners, plugs or the like.

It is easy to observe the swimming movement of the lure in the swimming device of the invention, because the testing pipe is preferably made entirely transparent by manufacturing it from plexiglass, for instance. The 10 swimming movement can also be observed in different flow conditions by changing the flow rate of the water simply by adjusting the power of a control device in a lower pipe-like means.

The swimming device of the invention does not require much space, since it can be placed in any kind of work room. Because the device is fully 15 water-proof, it also does not require any special water-proofing properties of its operating environment.

BRIEF DESCRIPTION OF THE FIGURES

In the following, the invention will be examined in greater detail by means of the appended drawings, in which

20 Figure 1 shows a schematic side view of a preferred embodiment of the swimming device of the invention, especially intended for testing large lures,

Figure 2 shows a perspective view of a smaller swimming device of the invention, especially suited for testing flies,

25 Figure 3 shows the longitudinal profile of the swimming device of Figure 2, and

Figure 4 shows the cross-profile of the swimming device of Figure 2.

DETAILED DESCRIPTION OF THE INVENTION

30 The structure and operation of the swimming device of the invention can be quickly described with reference to Figure 1. The device comprises two pipe-like means which are preferably arranged on top of each other and in which water runs, i.e. in operating position, the device shows a lower flow pipe 1 and an upper testing pipe 2. These pipe-like means are usually arranged in 35 a substantially horizontal position and they are, in the vertical direction,

connected to each other by connection means 3 and 4 which enable the circulation of a fluid 5 - preferably water let into the device - in both means. The fluid let into the swimming device is circulated by a control means 6 arranged in the flow pipe, which control means preferably is a conventional 5 propeller run by an electric motor 7. However, nothing prevents the use of another kind of arrangement known per se, such as a water turbine, for controlling the fluid.

To stabilise the flow of the fluid 5, at least the flow pipe 1 of the device can be fitted with control lamellas 8 in the longitudinal direction of the 10 pipe as shown in Figure 4. On the other hand, stilling basins 9 and 10 are arranged at each end of the device to control the swirling of the fluid and the fluid in the device is led through the basins as it flows between the flow pipe and the testing pipe 2. The stilling basins can also be equipped with control lamellas 11 or the like to reduce the swirling of the fluid.

15 The upper pipe-like means, i.e. testing pipe 2, is arranged to be at least partly transparent by manufacturing it of plexiglass or acrylic resin, for instance, whereby the lure 12 lowered into the pipe and its behaviour in the flow of the testing pipe can be seen from all essential directions. The testing pipe has reception means 13, i.e. a lure tower, for lowering the lure into the 20 testing tube, and the reception means are arranged to open at their testing-pipe-end into the testing pipe, their other end being arranged to receive the lure placed into the lure tower.

The device functions by filling it with fluid 5, usually clean water, as 25 shown in Figure 1. The device is filled up to the reception means 13 to create pressure in the testing pipe 2. When the device is filled with water, the required water flow is achieved by the control means 6 by starting the motor 7. Forced by the control means, water flows to the stilling basin 9 at the end of the lower pipe-like means, i.e. flow pipe 1, which basin is arranged to be closed, and onward through the connection means 3 to the upper pipe-like 30 means, i.e. testing pipe 2. The testing pipe is preferably arranged to narrow in the direction of fluid flow, which prevents air bubbles generated by the control means from collecting on the walls of the pipe and allows them to flow to the lure tower and exit the device. The water flows at a rate defined by the control means through the testing pipe and exits through the connection means 4 at 35 the other end of the pipe to the second stilling basin 10. By also making the stilling basin 10 closed, the efficiency of the device is improved, but a closed

structure of the basin is, however, not necessary for the operation of the device. Next, the lure 12 to be tested is attached to a fishing line 14 and lowered from the lure tower 13 to the testing pipe where its swimming movement can be observed. In addition, an accelerating flow rate is achieved 5 in the testing pipe which narrows toward its other end, whereby the lure being tested can immediately be tested in different flow conditions by moving it to different locations in the testing pipe.

Figures 2 to 4 shows a swimming device intended especially for flies and small lures and mainly corresponding in structure to the device 10 described above. This second embodiment of the invention is, however, more compact in structure, and the pipe-like means - flow pipe 1 and testing pipe 2 - are connected to each other to reduce the size and simplify the structure. The propeller acting as the control means 6 is arranged in the flow pipe, and the testing pipe 2 which preferably narrows toward its other end is tightly arranged 15 on the top surface 15 of the outer casing of the pipe. This testing pipe can be in shape a cut off pyramid, for instance, as in Figure 2 or a cut off cone. The water being circulated in the device is led between the pipes through two flow ports 16 and 17 acting as connection means and located on the top surface of the casing of the flow pipe. These flow ports are arranged at a distance from 20 the flow pipe ends 18 and 19, thus forming the stilling basins 9 and 10 at each end of the flow pipe. To reduce swirling in the water flow, concentric protrusions 11 according to Figure 2 are preferably located in the end pieces 25 which close the ends of the flow pipe.

The lure tower 13 is preferably arranged on the top surface of the 25 outer casing of the testing pipe 2 in such a manner that the discharge opening 21 between the lure tower and the testing pipe is, in the flow direction of water, arranged to be at least partly separate from the flow port 16 below in order to form a third stilling basin 22 at the end of the testing pipe. This prevents the flowing water from hitting the lure tower and achieves a steadier flow on the 30 entire length of the device.

The second embodiment of the device according to the invention 35 functions by filling it with water, for instance, as shown in Figure 2. In this case, too, the filling is performed up to the reception means 13 to create a sufficient pressure to steady the water flow in the testing pipe 2. When the device is filled with water, the required water flow is achieved by the control means 6 by starting the motor 7, and forced by the control means, water flows

to the stilling basin 9 at the end of the flow pipe 1. From the stilling basin, water flows through the flow port 16 to the testing pipe 2 and the third stilling basin 22 between the lure tower and the end of the testing pipe. Water flows on at the rate defined by the control means through the testing pipe arranged 5 to narrow in the flow direction and discharges through the flow port 17 at the other end of the testing pipe to the second stilling basin 19 at the end of the flow pipe and on again to the control means. The lure 12 to be tested is attached to a line 14 and lowered from the lure tower 13 into the testing pipe where its swimming movement can be observed.

10 It is to be understood that the above description and the related figures are only intended to illustrate the present invention. The invention is thus not restricted to the above or to the embodiment specified in the claims, but it will be obvious to a person skilled in the art that many variations and modifications of the invention are possible within the scope of the inventive 15 idea specified in the appended claims.

CLAIMS

1. A swimming device for testing a lure (12) to be used in rod-fishing, **characterized** in that the swimming device comprises two substantially parallel pipe-like means, a flow pipe (1) and testing pipe (2), which are arranged in a substantially horizontal position and connected together by connection means (3, 4) arranged preferably at both ends of the pipes, and there are stilling basins (9, 10) immediately next to the connection means, and that a control means (6) maintaining the flow of a fluid (5) led into the swimming device is arranged in one pipe-like means, for testing the lure (12) lowered into the swimming device through a lure tower (13) extending from the testing pipe and connected thereto, in a fluid flow generated in the testing pipe.
2. A swimming device as claimed in claim 1, **characterized** in that the testing pipe (2) is at least partly transparent.
3. A swimming device as claimed in claim 1 or 2, **characterized** in that the control means (6) is a propeller.
4. A swimming device as claimed in any one of the preceding claims, **characterized** in that the control means (6) is arranged in the flow pipe (1).
5. A swimming device as claimed in any one of the preceding claims, **characterized** in that the flow pipe (1) has control lamellas (8) in the longitudinal direction of the device to prevent swirling in the fluid flow.
6. A swimming device as claimed in any one of the preceding claims, **characterized** in that the testing pipe (2) is arranged to the side of the flow pipe (1) in such a manner that the connection means comprise flow ports (16, 17) in the casing of the flow pipe.
7. A swimming device as claimed in any one of the preceding claims, **characterized** in that the flow pipe (1) is arranged to be longer than the testing pipe (2) and to have stilling basins (9, 10) at both ends.
8. A swimming device as claimed in any one of claims 4 to 7, **characterized** in that at least the stilling basin (9) on the side of the direction of fluid flow caused by the control means (6) has protrusions (11) to reduce the swirling movement of the fluid (5).
9. A swimming device as claimed in claim 8, **characterized** in that the protrusions (11) are concentric.

10. A swimming device as claimed in any one of the preceding claims, **characterized** in that a discharge opening (21) connecting the lure tower (13) and the testing pipe (2) is arranged in the flow direction of the fluid (5) to be at least partly separate from the flow port (16) between the 5 testing pipe and the flow pipe (1).

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 March 2001 (29.03.2001)

PCT

(10) International Publication Number
WO 01/20978 A1

(51) International Patent Classification⁷: A01K 85/00, 97/00

(21) International Application Number: PCT/FI00/00781

(22) International Filing Date: 15 September 2000 (15.09.2000)

(25) Filing Language: Finnish

(26) Publication Language: English

(30) Priority Data: U990396 17 September 1999 (17.09.1999) FI

(71) Applicant (for all designated States except US): KAUST-MARK OY [FI/FI]; Vissavedentie 1, FIN-69600 Kaustinen (FI).

(72) Inventor; and

(75) Inventor/Applicant (for US only): PETÄJÄ-SUVANTO, Tuomo [FI/FI]; Peltolankuja 3, FIN-69700 Veteli (FI).

(74) Agent: POHJANMAAN PATENTTITOIMISTO KOLSTER OY; C/o Kolster OY AB, Iso Roobertinkatu 23, P.O. Box 148, FIN-00121 Helsinki (FI).

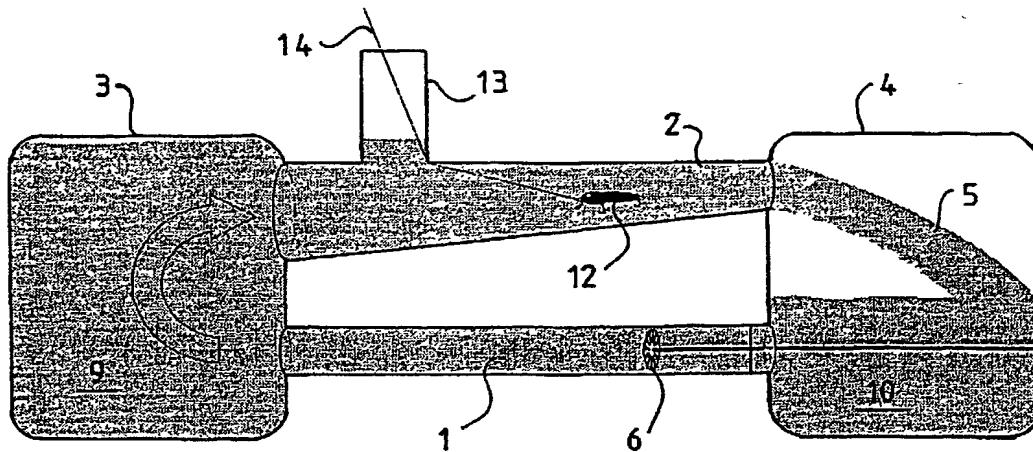
(81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— With international search report.

[Continued on next page]

(54) Title: SWIMMING DEVICE



(57) Abstract: The present invention relates to a swimming device for testing a lure (12) used in rod-fishing. This type of a device comprises two substantially parallel pipe-like means (1, 2) on top of each other and arranged in a substantially horizontal position. The pipe-like means are preferably connected to each other by connection means (3, 4) arranged at both ends of the pipes, and there are stilling basins (9, 10) immediately next to the connection means. Further, a control means (6) maintaining the flow of the fluid (5) led into the swimming device is arranged into one of the pipe-like means. In the operating position of the device, the upper pipe-like means, i.e. testing pipe, has a lure tower (13) connected to the pipe and protruding from it, and the lure (12) can be lowered into the swimming device for testing it in the fluid flow caused by the control means in the testing pipe.

WO 01/20978 A1

WO 01/20978

PCT/FI00/00781

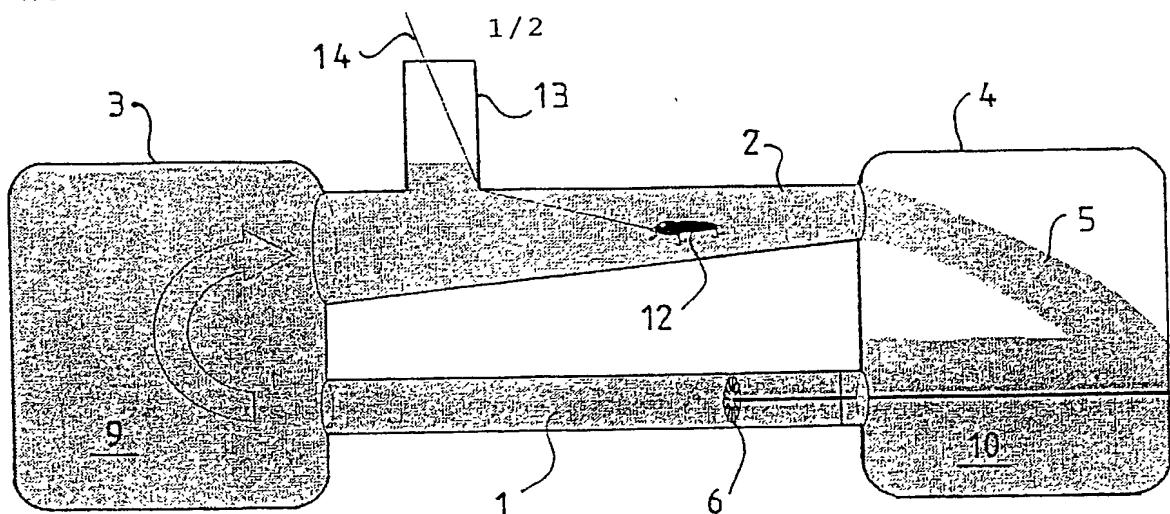


FIG. 1

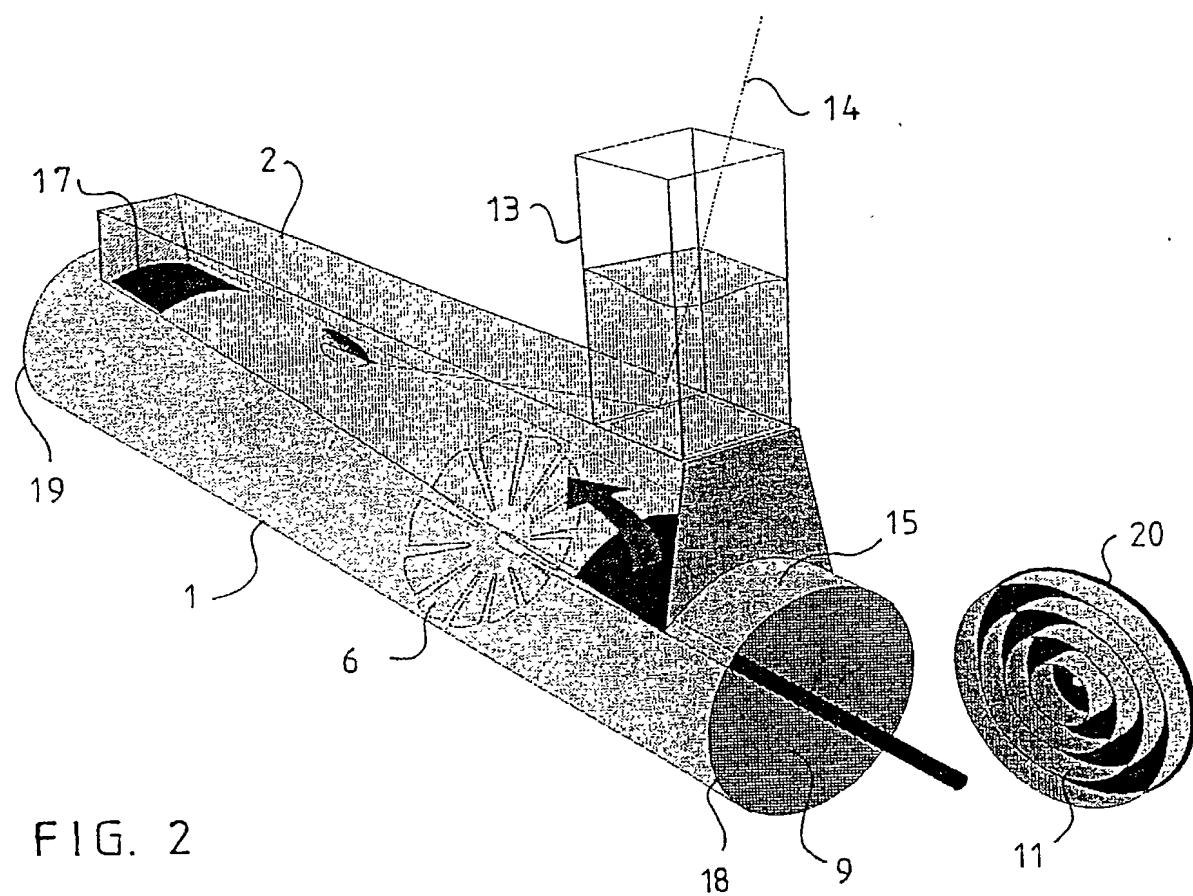


FIG. 2

2 / 2

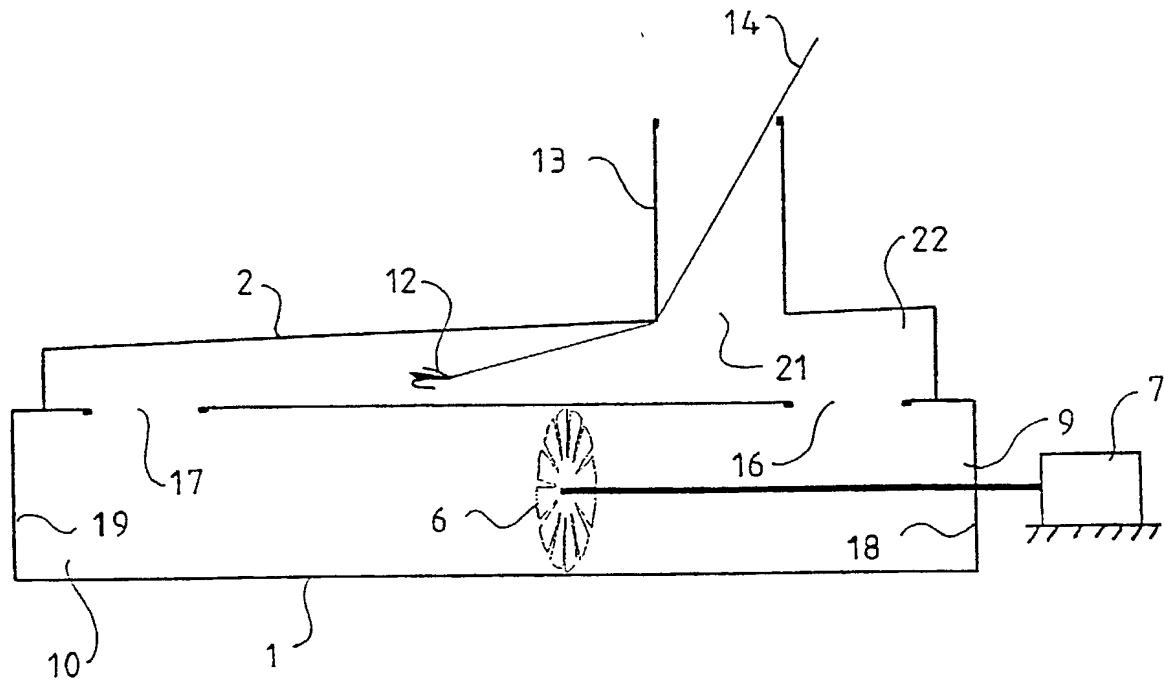


FIG. 3

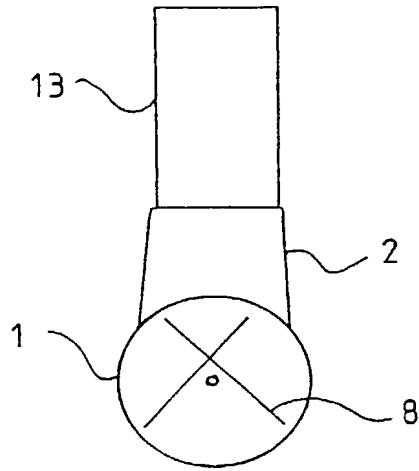


FIG. 4

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SWIMMING DEVICE

the specification of which: *(check one)*

REGULAR OR DESIGN APPLICATION

[] is attached hereto.

[X] was filed on 15th March 2002 as application Serial No. 10/088,116 and was amended on (if applicable).

PCT FILED APPLICATION ENTERING NATIONAL STAGE

[X] was described and claimed in International application No. PCT/FI00/00781 filed on 15th September 2000 and as amended on (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, '1.56.

PRIORITY CLAIM

I hereby claim foreign priority benefits under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FOREIGN APPLICATION(S)

| Country | Application Number | Date of Filing (day, month, year) | Priority Claimed |
|---------|--------------------|--------------------------------------|------------------|
| Finland | U990396 | 17 th September 1999 | X |
| | | | |

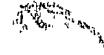
(Complete this part only if this is a continuing application.)

I hereby claim the benefit under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations '1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Serial No.)

(Filing Date)

(Status--patented, pending, abandoned)



POWER OF ATTORNEY

The undersigned hereby authorizes the U.S. attorney or agent named herein to accept and follow instructions from as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned. In the event of a change in the persons from whom instructions may be taken, the U.S. attorney or agent named herein will be so notified by the undersigned.

As a named inventor, I hereby appoint the registered patent attorneys represented by Customer No. 000466 to prosecute this application and transact all business in the Patent and Trademark Office connected therewith, including: Robert J. PATCH, Reg. No. 17,355, Andrew J. PATCH, Reg. No. 32,925, Robert F. HARGEST, Reg. No. 25,590, Benoît CASTEL, Reg. No. 35,041, Eric JENSEN, Reg. No. 37,855, Thomas W. PERKINS, Reg. No. 33,027, and Roland E. LONG, Jr., Reg. No. 41,949,

c/o YOUNG & THOMPSON,
Second Floor,
745 South 23rd Street,
Arlington, Virginia 22202.

Address all telephone calls to Young & Thompson at 703/521-2297. Telefax: 703/685-0573.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor: **Tuomo PETÄJÄ-SUVANTO**
(*given name, family name*)

Inventor's signature James Ribayu-Sarmiento Date 15 April 2002

Residence: Veteli, Finland **FIX** Citizenship: **Finnish**

Post Office Address: Puukorventie 13 A 3, FIN-69700 Veteli, Finland

Full name of second joint inventor, if any:
(given name, family name)

Inventor's signature _____ Date _____

Residence: _____ Citizenship: _____

Post Office Address:

Full name of third joint inventor, if any:
(given name, family name)

Inventor's signature _____ **Date** _____

Residence: _____ Citizenship: _____

Post Office Address: